A LAND USE ELEMENT

for the town of

DREXEL NORTH CAROLINA

1976-1995

PREPARED BY: TRAFFIC AND PLANNING ASSOCIATES, INC.
HICKORY, NORTH CAROLINA

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A LAND USE ELEMENT

FOR THE

TOWN OF DREXEL, NORTH CAROLINA

******

Prepared By:

Traffic and Planning Associates, Inc.
Hickory, North Carolina
April, 1977

Prepared For:

TOWN OF DREXEL, NORTH CAROLINA

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The preparation of this report was financed in part through a comprehensive planning grant from the Department of Natural and Economic Resources of the State of North Carolina.

April, 1977

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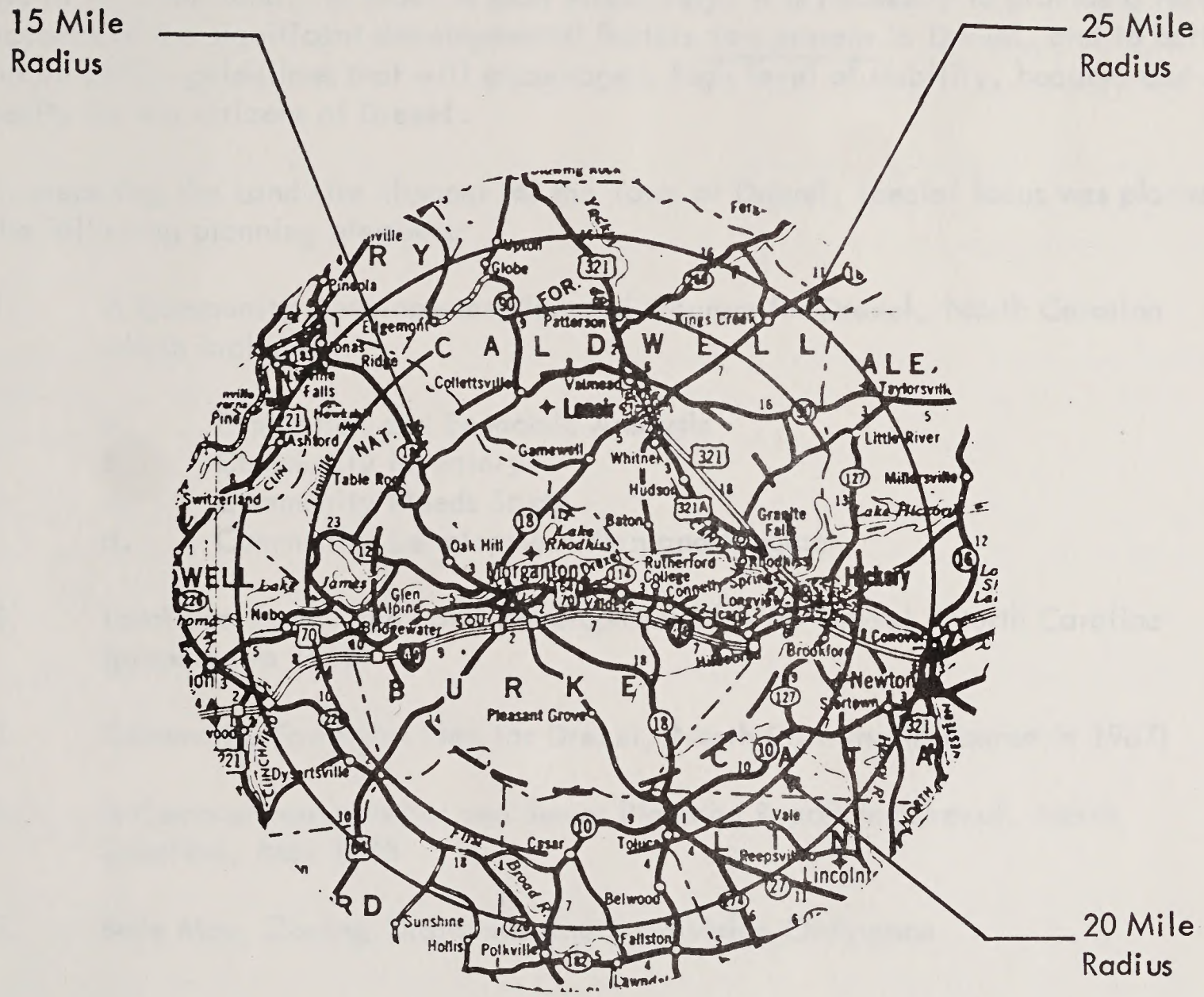

Source: Employment Security Commission of North Carolina

A LAND USE ELEMENT FOR THE TOWN OF DREXEL, NORTH CAROLINA

INTRODUCTION

One of the principal objectives in planning for the future growth of Drexel is the wise use of its urban land. In order to plan effectively, it is necessary to provide a reliable account of the significant developmental factors now present in Drexel, and to outline future policy guidelines that will encourage a high level of stability, beauty, and prosperity for the citizens of Drexel.

In preparing the Land Use Element for the Town of Drexel, special focus was placed on the following planning elements:

1. A Community Development Plan and Program for Drexel, North Carolina which included:

    a. Population and Economic Analysis
    b. Community Inventory
    c. Community Needs Study
    d. Community Development Plan and Program

2. Land Use Survey and Land Development Plan for Drexel, North Carolina (prepared in 1966)

3. Community Facilities Plan for Drexel, North Carolina (prepared in 1967)

4. A Comprehensive Water and Sewer Planning Report for Drexel, North Carolina, May 1975

5. Base Map, Zoning Ordinance and Subdivision Ordinance

SETTING

Drexel, North Carolina is located in central Burke County approximately five miles east of Morganton. A short distance south and within easy access lies Interstate 40, an important east-west route in both the State and Nation. Drexel is situated in the portion of Burke County that lies within the Piedmont Plateau, the northwestern part of the county lies within the Appalachian Mountain Range. The altitude of Drexel is 1,192 feet above sea level. Map 1 shows the regional location of Drexel.

The soils of the planning area are predominantly of the Madison Sandy Clay Loam and Cecil Clay Loam types. The former abounds in the northern, eastern and western portions of the planning area, while the latter type of soil is found in the southern portion of the planning area.

Both types of soils have good permeability and are suitable for septic tank installation. It should be noted, however, that Madison soils are sometimes shallow to rock and this could be a limiting factor in the installation of septic tanks. There are patches of Congaree Silty Loam soil to the southeast and west, and septic tank locations are not recommended for these areas because this type of soil has very poor permeability.

Drexel is located in the Catawba River Basin, and drainage is primarily northeast towards the river. There are no flood plains or flash flood problems of any consequence; however, it is suggested that houses not be built too close to the several streams within the planning area.

Drexel has a moderate climate with few extremes of either hot or cold temperatures. The mean annual temperature is about 59°F and the mean annual rainfall is about 50 inches. The average length of the frost-free growing season is about 192 days.

Ground water supplies ranging up to 250,000 gallons per day are available from individual wells, and additional high yielding water wells should not be difficult to develop. However, in a few locales the water may contain a high content of iron.

Incorporated in 1913, Drexel owes its growth largely to the furniture industry which employs a substantial portion of its population.

PLANNING AREA DEFINED

For purposes of data gathering and land use planning, the Drexel Planning Area shall mean the Town and its one-miler perimeter area. Fringe areas must be included in planning, as growth and its consequences do not respect town boundaries. The Town of Drexel consists of 776.46 acres; the fringe areas contain 4,600.04 acres. In all, the Planning Area amounts to 5,376.5 acres or approximately 8.5 square miles. Map 2 shows the Planning Area for the Town.

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TOWN OF DREXEL

BURKE COUNTY, NORTH CAROLINA

DATE: NOV., 1975

BY: TRAFFIC AND PLANNING ASSOCIATES, INC.

MAP 2

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SCALE IN FEET

The preparation of this report was financed in part through a comprehensive planning grant from the Department of Natural and Economic Resources of the State of North Carolina.

POPULATION AND ECONOMY[1]

Population

A special survey conducted by Traffic and Planning Associates in November, 1975 revealed the present population of Drexel to be 1,590 and that of its one-mile perimeter to be 3,571 persons. This figure represents a four-fold increase since 1920 when Drexel had a population of 382. Table 1 shows past and projected population trends for Drexel and other selected areas. The rapid growth of the Town during this period can be largely attributed to the furniture industry, in particular Drexel Enterprises, which provides jobs for many of the citizens of the area.

PAST AND PROJECTED POPULATION TRENDS
FOR SELECTED AREAS: TABLE 1

Year	Town of Drexel	One-Mile Planning Area*	Drexel Township	Burke County
1920	382	---	---	---
1930	781	---	1,714	23,297
1940	881	---	2,448	29,410
1950	988	---	2,414	38,615
1960	1,146	---	2,594	52,701
1970	1,431	---	4,563	60,364
1975**	1,590	3,571	4,677	65,282
1980***	1,628	3,658	4,790	70,200
1985	1,793	4,028	5,275	75,600
1990	1,958	4,398	5,760	81,000
1995	2,092	4,708	6,155	84,900

* Includes a small portion of Morganton Township.
** Estimated current population.
*** Projected population.
Source: U. S. Bureau of the Census; Projections computed by the Div. of Community Planning, Dept. of Natural and Economic Resources.

[1]The reader who desires additional information on either the population or economic situations in Drexel should consult the recently published report entitled "A Community Development Plan and Program for Drexel, North Carolina" available to the public at the Drexel Town Hall.

Another important characteristic of the population influencing land use planning is age and sex distribution. The population never remains static; this has an important influence on the community's economic and sociological environment.

According to the 1970 Census, the young working force (15-44) accounted for the largest percentage of the population containing 49.0 percent of the male and 40.1 percent of the female population. Table 2 shows the changes that have occurred from 1960 to 1970.

AGE AND SEX CHARACTERISTICS OF THE 1960-1970
POPULATION IN DREXEL: TABLE 2

	1960				1970			
	Male	% of Pop.	Female	% of Pop.	Male	% of Pop.	Female	% of Pop.
Pre-School (under 5 yrs.)	50	9.3	59	9.7	48	7.1	46	6.1
School (5-14 yrs.)	110	20.4	114	18.8	119	17.6	176	23.3
Young Working Force (15-44 yrs.)	239	44.3	273	45.0	332	49.0	302	40.1
Older Working Force (45-64 yrs.)	107	19.9	124	20.4	155	22.9	180	23.9
Retired (65 + yrs.)	33	6.1	37	6.1	23	3.4	50	6.6
TOTALS	539	100%	607	100%	677	100%	754	100%

Source: U. S. Bureau of the Census.

Analysis of the information in Table 2 reveals the following trends during the period 1960 to 1970:

1. Females outnumbered males.
2. A decline in the number of babies being born. This change can be attributed to more women joining the work force and changing social attitudes.
3. An increase in the total number of workers.
4. A slight increase in the number of retired citizens.

Economy

The economy, of course, is dominated by the furniture industry and to a somewhat lesser extent, the textile industry. While Drexel has only two industries within its Town limits -- Drexel Enterprises and Drexel Knitting Mills -- 70.1 percent of its labor force is employed in manufacturing occupations. Table 3 shows the occupation breakdown in 1970 for Drexel's population.

This lack of diversification could create serious economic problems for Drexel if the furniture and textile industries were crippled for any reason. This suggests a need for new commercial and industrial enterprises which ought to be sought in order to better balance the local economic base. As recommended in the "Community Development Plan and Program for Drexel, North Carolina", these new industries should be of two types.

1. There is a need to create new non-basic industries to serve the citizens of Drexel and to eliminate weakness in the economy resulting from the lack of diversity.

2. Drexel should pursue the location of high-paying, capital-intensive industries which will bring additional income into Drexel and thereby improve the standard of living of its citizens. These should be "dry" industries so as to provide the greatest number of jobs while protecting Drexel's available waste water capacity.

EMPLOYED PERSONS 14 YEARS AND OLDER
BY INDUSTRY IN DREXEL: TABLE 3

Industry	Persons Employed	% of Total
Construction	13	1.8
Manufacturing	502	70.1
(Durable Goods)	(173)	(24.2)
Transportation	0	0
Communications, Utilities & Sanitary Services	0	0
Wholesale/Retail Trade	66	9.2
Finance, Insurance, Business and Repair	18	2.5
Professional and Related Services	31	4.3
Education Services	60	8.4
Public Administration	10	1.4
Other Industries	16	2.2
TOTAL	716	100.0

Source: U. S. Census, 1970 5th Count Information.

Summary

The population and economy of Drexel was dealt with extensively in the recently published report "A Community Development Plan and Program for Drexel, North Carolina". Since this land use element is to be used in conjunction with that report, it was felt that it was unnecessary to present another complete report on the population and economy herein. However, some of the major points presented in the study are summarized below:

Positive factors favoring the population and economic growth of Drexel are:

1. Steady, rapid population growth.

2. A high percentage of the population in the middle and upper income brackets (30.8%).

3. A relatively low percentage of substandard housing (13.8%).

4. Low unemployment rate prior to the present recession (0% in 1970).

5. A skilled and experienced labor force.

Negative factors against the population and economic growth of Drexel are:

1. Lack of economic diversification.

2. Low educational attainment. (This is not true of the younger members of the Drexel population.)

3. Inadequate labor supply. 71.8% of the total working age group (14 years and older) are in the labor force. The female labor participation rate is exceptionally high at 70.3% which would tend to discourage new industries from locating in Drexel.

4. An outmigration of the college-educated young workers.

SURVEY OF EXISTING LAND USE

In order to plan properly for the future use of urban land in Drexel, it is necessary to discover what has happened in the past and what conditions are at present.

Many of the existing land uses in the Drexel Planning Area should be maintained in the future. Certain trends will cause some use changes almost automatically. A few changes may require encouragement. New land will also be converted to urban use. Undoubtedly these changes will affect the visual image and function of Drexel and its environs. By planning for such change now, Drexel can develop into a town that will not only be a pleasant place to live, but will provide a more functional and economic environment.

A survey of existing land use can help analyze future land use needs and point out land use problems that have occurred in the past.

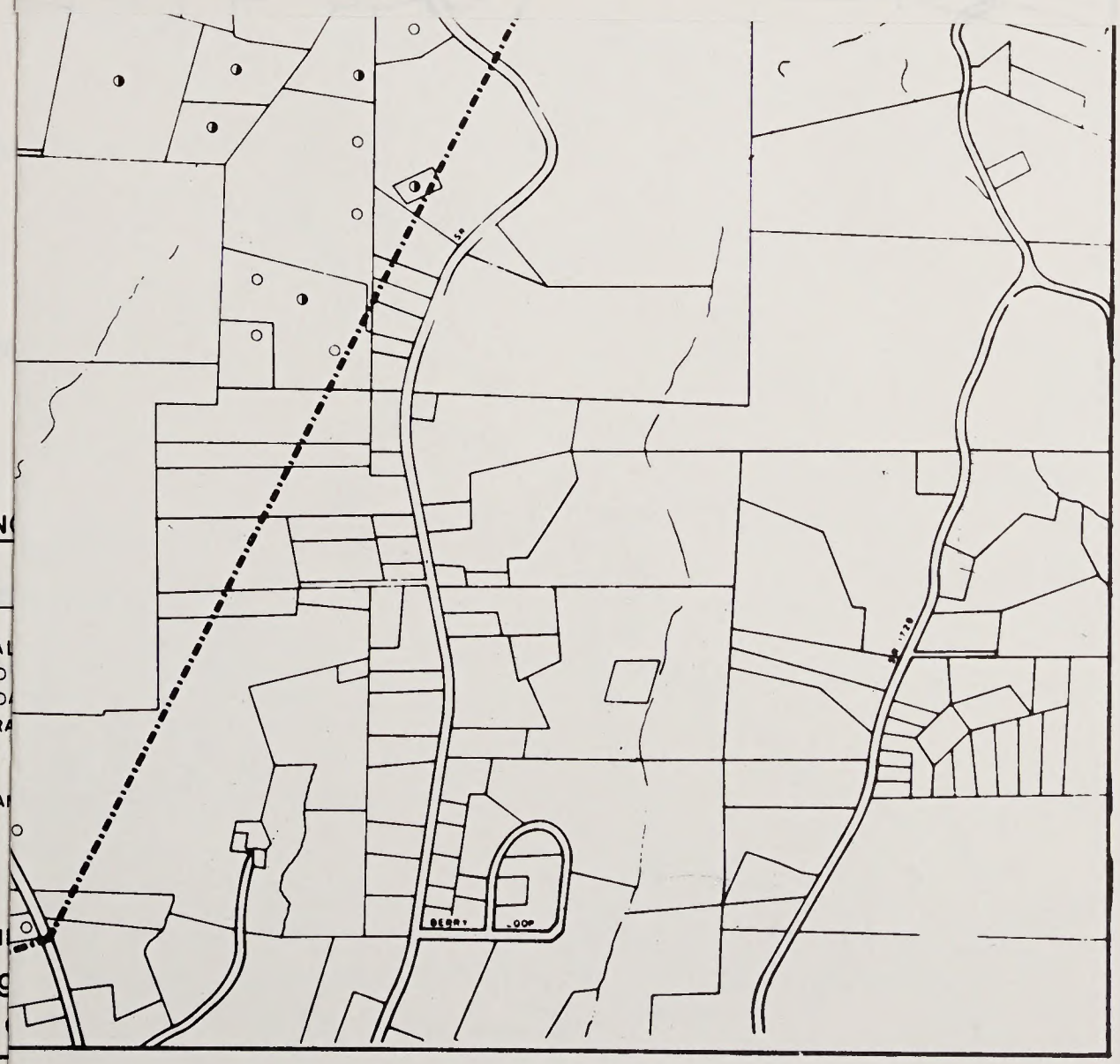
In November, 1975, Traffic and Planning Associates conducted a windshield survey of the Town of Drexel and the one-mile perimeter to obtain information concerning land use and condition of structures. For the purpose of this analysis, existing land uses were divided into five classifications. Map 3 shows the existing land use and conditions of structures, and Table 4 and Figure 1 give a detailed breakdown of these existing uses by developed land, percentages of the total land area within the corporate limits and within the fringe area. Data in 1975 has been compared to information obtained from the 1966 Land Use Survey.

A description of each of the five land use classifications, the changes that have occurred in land uses between 1966 and 1975, and any problems that may exist with present uses is as follows. Included also is a discussion of undeveloped land.

UNDEVELOPED LAND

Undeveloped land consists of farm land, forest, open space, or land void of any structural or physical development. Within the Town Limits of Drexel, 150.03 acres, or 19.3 percent of the total acreage is presently undeveloped or vacant. This represents a 52 percent reduction from 1966 when there were 314 acres of undeveloped land within Drexel. The majority of the vacant land is located in the northern and northwestern quadrants of the Town.

Within the one-mile fringe area, approximately 3,504.94 acres, or 76.2 percent of the total acreage is undeveloped. This is a slight decrease from the 1966 figure of 3,686 acres. Examination of Map 3 reveals the majority of vacant land is located in the northern section of the one-mile fringe area.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RESIDENTIAL
○ - STANDARD
◑ - SUBSTANDA
● - DETERIORA
T - TRAILER
V - VACANT
4 - MULTI - FA
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TOWN OF DREXEL

BURKE COUNTY, NORTH CAROLINA

DATE: NOV., 1975

BY: TRAFFIC AND PLANNING ASSOCIATES, INC.

MAP 3

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SCALE IN FEET

EXISTING LAND USE

LEGEND

RESIDENTIAL
- ○ STANDARD
- ◑ SUBSTANDARD
- ● DETERIORATING
- T TRAILER
- V VACANT
- 4 MULTI-FAMILY

NON-RESIDENTIAL
- □ STANDARD
- ◪ SUBSTANDARD
- ■ DETERIORATING
- INDUSTRY
- UTILITIES
- SOCIAL / CULTURAL

The preparation of this report was financed in part through a comprehensive planning grant from the Department of Natural and Economic Resources of the State of North Carolina.

TABLE 4
DREXEL PLANNING AREA LAND USE
ACREAGE AND PERCENTAGE

	CORPORATE LIMITS						FRINC		
	Acres		% of Developed Acres		% of Total Acres		Acres		De A
	1966	1975	1966	1975	1966	1975	1966	1975	1966
Industrial	56.53	58.90	13.5	9.4	7.7	7.6	11.31	18.17	1.2
Commercial	6.42	8.33	1.5	1.3	.8	1.1	36.27	23.09	3.8
Social/Cultural	54.39	69.90	12.9	11.2	7.0	9.0	32.73	83.07	3.4
Residential	217.63	395.14	51.6	63.1	28.0	50.9	599.17	667.27	62.8
Transportation/Utilities	87.06	94.16		15.0	11.8	12.1	274.47	303.50	28.8
Total Developed	422.03	626.43	100.0	100.0			953.95	1,095.10	100.0
Open Land	314.37	150.03					3,686.15	3,504.94	
Total Acres	736.40	776.46	(1.2 sq. miles)				4,640.10	4,600.04	(7.3 sq

% Total Acres	1966	1975	1966
Total Developed	57.3	80.7	20.6
Total Vacant	42.7	19.3	79.4
	100.0	100.0	100.0

SOURCE: Traffic and Planning Associates, Inc., Field Survey, November, 1975.

TABLE 4
DREXEL PLANNING AREA LAND USE
ACREAGE AND PERCENTAGE

	CORPORATE LIMITS						FRINGE AREA						TOTAL PLANNING AREA					
	Acres		% of Developed Acres		% of Total Acres		Acres		% of Developed Acres		% of Total Acres		Acres		% of Developed Acres		% of Total Acres	
	1966	1975	1966	1975	1966	1975	1966	1975	1966	1975	1966	1975	1966	1975	1966	1975	1966	1975
Industrial	56.53	58.90	13.5	9.4	7.7	7.6	11.31	18.17	1.2	1.7	.2	.4	67.84	77.07	4.9	4.5	1.3	1.4
Commercial	6.42	8.33	1.5	1.3	.8	1.1	36.27	23.09	3.8	2.1	.8	.5	42.69	31.42	3.1	1.8	.8	.6
Social/Cultural	54.39	69.90	12.9	11.2	7.0	9.0	32.73	83.07	3.4	7.6	.7	1.8	87.12	152.97	6.3	8.9	1.6	2.8
Residential	217.63	395.14	51.6	63.1	28.0	50.9	599.17	667.27	62.8	60.9	13.0	14.5	816.80	1,062.41	59.4	61.7	15.2	19.8
Transportation/Utilities	87.06	94.16		15.0	11.8	12.1	274.47	303.50	28.8	27.2	6.0	6.6	361.53	397.66	26.3	23.1	6.7	7.4
Total Developed	422.03	626.43	100.0	100.0			953.95	1,095.10	100.0	100.0			1,375.98	1,721.53	100.0	100.0		
Open Land	314.37	150.03					3,686.15	3,504.94					4,000.52	3,654.97				
Total Acres	736.40	776.46	(1.2 sq. miles)				4,640.10	4,600.04	(7.3 sq. miles)				5,376.50	5,376.50	(8.5 sq. miles)			

% Total Acres	1966	1975	1966	1975	1966	1975
Total Developed	57.3	80.7	20.6	23.8	25.6	32.0
Total Vacant	42.7	19.3	79.4	76.2	74.4	68.0
	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: Traffic and Planning Associates, Inc., Field Survey, November, 1975.

GE AREA			TOTAL PLANNING AREA					
% of veloped cres	% of Total Acres		Acres		% of Developed Acres		% of Total Acres	
1975	1966	1975	1966	1975	1966	1975	1966	1975
1.7	.2	.4	67.84	77.07	4.9	4.5	1.3	1.4
2.1	.8	.5	42.69	31.42	3.1	1.8	.8	.6
7.6	.7	1.8	87.12	152.97	6.3	8.9	1.6	2.8
60.9	13.0	14.5	816.80	1,062.41	59.4	61.7	15.2	19.8
27.2	6.0	6.6	361.53	397.66	26.3	23.1	6.7	7.4
100.0			1,375.98	1,721.53	100.0	100.0		
			4,000.52	3,654.97				
. miles)			5,376.50	5,376.50	(8.5 sq. miles)			

1975	1966	1975
23.8	25.6	32.0
76.2	74.4	68.0
100.0	100.0	100.0

DREXEL PLANNING AREA TOTAL DEVELOPED ACREAGE

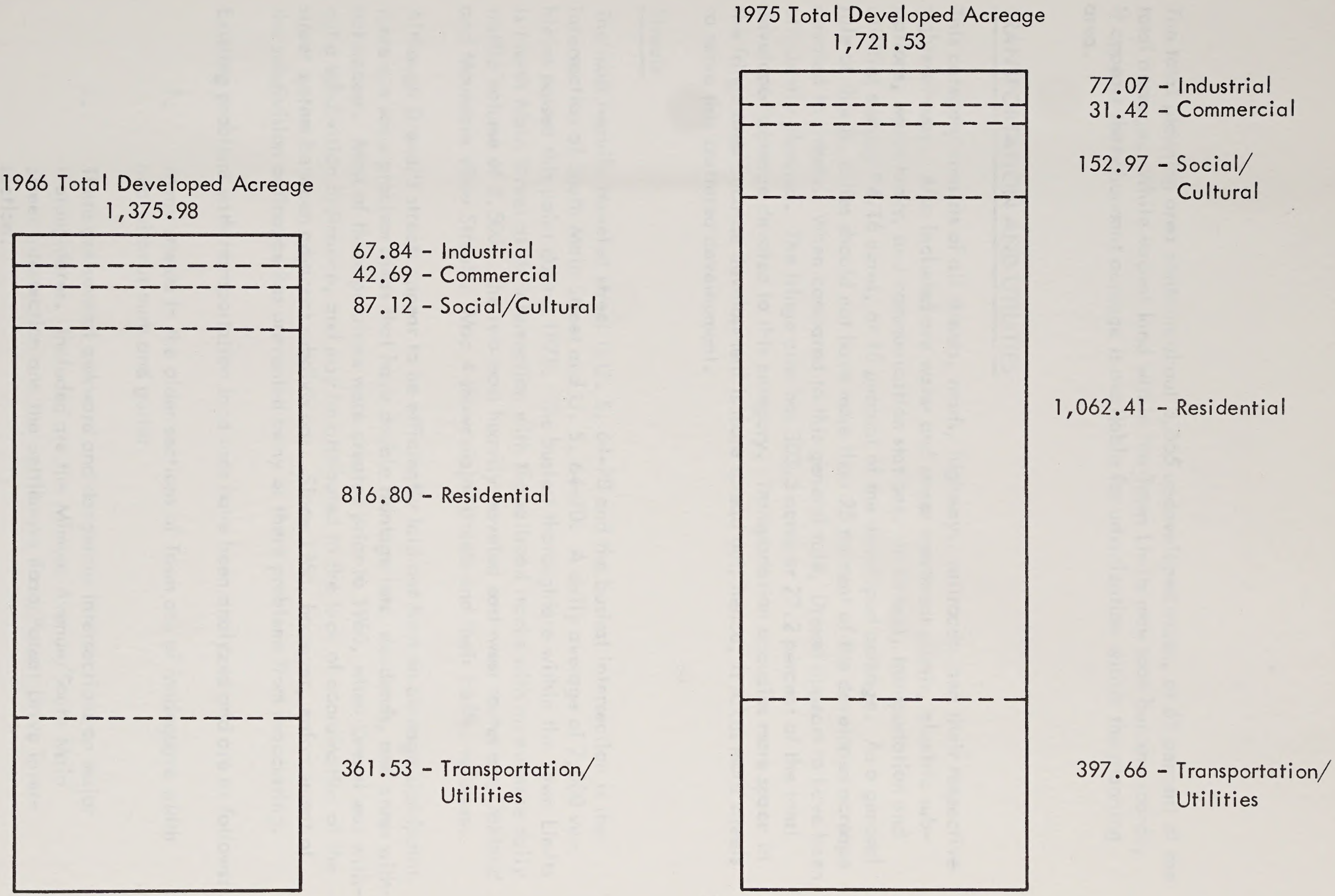


Figure 2

Sources: N. C. Dept. of Conservation and Development, Div. of Community Planning, Population and Economy, Land Use Survey and Analysis and Land Development Plan.
Traffic and Planning Associates, Inc., Field Survey, November 1975.

The total planning area contains about 3,655 undeveloped acres, or 68 percent of the total acreage. While vacant land within the Town Limits may soon become scarce, it appears that abundant acreage is available for urbanization within the planning area.

TRANSPORTATION AND UTILITIES

This category consists of all streets, roads, highways, railroads, and their respective rights-of-way. Also included are water and sewer treatment plants, electric sub-stations, water tanks, and communication stations. In Drexel, transportation and utilities occupy 94.16 acres, or 15 percent of the developed acreage. As a general rule of thumb, cities should not have more than 25 percent of the developed acreage devoted to streets. When compared to this general rule, Drexel appears to have been efficiently planned. The fringe area has 303.5 acres or 27.2 percent of the total developed acreage devoted to this category. Transportation occupies more space in the fringe area because development is more spread out; hence, it takes more streets to serve this scattered development.

Streets

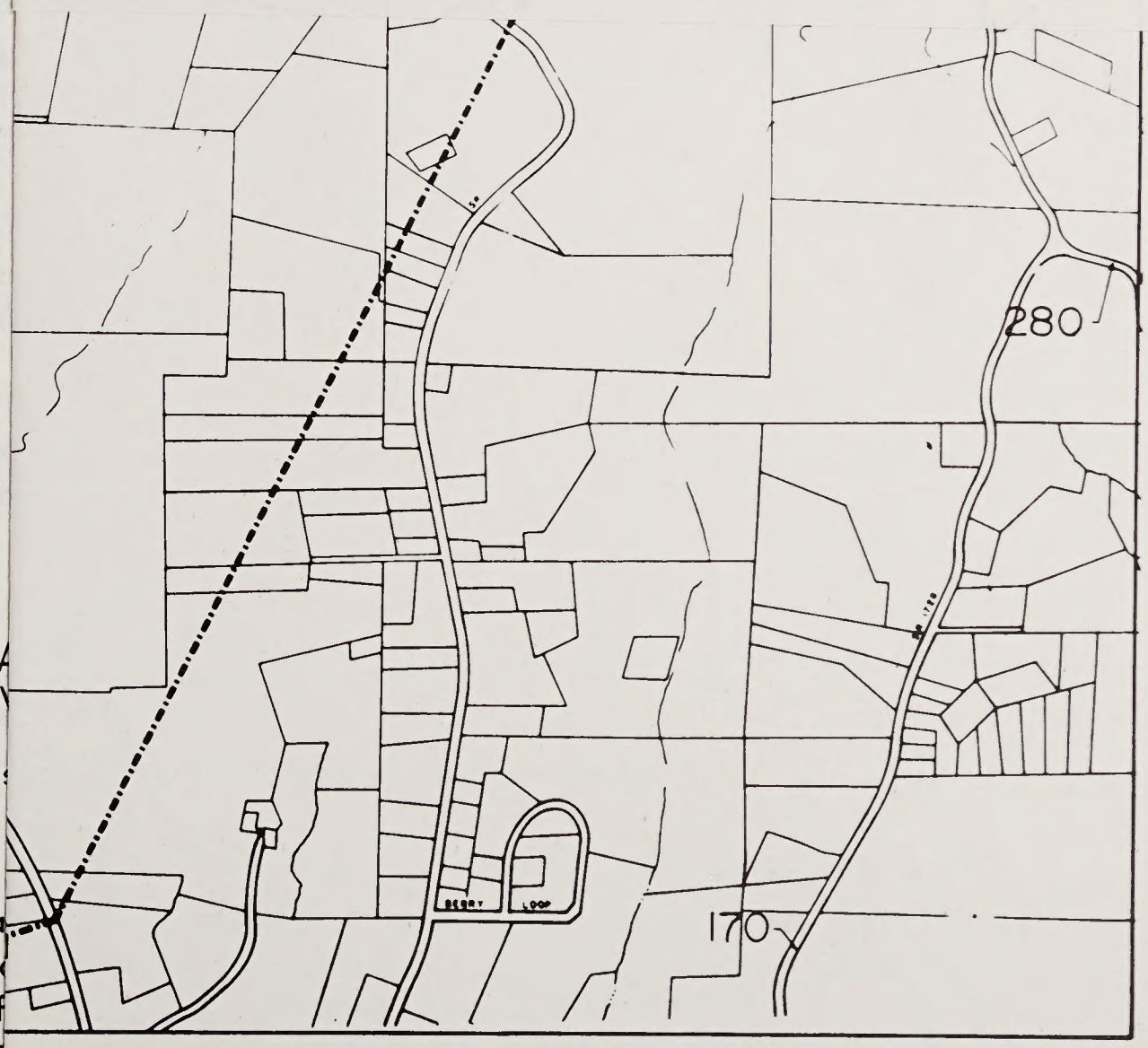
The most heavily traveled street is U. S. 64-70 and the busiest intersection is the intersection of South Main Street and U. S. 64-70. A daily average of 7,000 vehicles passed this point during 1975. The busiest thoroughfare within the Town Limits is North Main Street at its intersection with the railroad tracks with an average daily traffic volume of 3,500. The two most heavily traveled east-west routes are Oakland and Mountain View Streets. Map 4 shows major streets and their traffic volumes.

Although Drexel's streets appear to be efficiently laid out from an acreage standpoint, there are some problem areas that have double frontage lots, deadends, and acres without access. Most of these problems were created prior to 1966, when Drexel was without a subdivision ordinance, and may be attributed to the lack of coordination of the street system between adjacent subdivisions. Since 1966, however, enforcement of the subdivision ordinance has prevented many of these problems from reoccurring.

Existing problems with transportation land uses have been analyzed and are as follows:

1. Many streets in the older sections of Town are of inadequate width and without curb and gutter.

2. There are several awkward and dangerous intersections on major thoroughfares. Included are the Mimosa Avenue/South Main Street intersection and the Settlemyre Road/Poteat Drive intersection.



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TOWN OF DREXEL

BURKE COUNTY, NORTH CAROLINA

DATE: NOV., 1975

BY TRAFFIC AND PLANNING ASSOCIATES, INC.

MAP 4

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500 0 500 1000

SCALE IN FEET

80
75
60
770
1330
1090
70
750
840
620
1100
1050
1340
3500
925
3300
1640
75
1360
9000
7000
3120
220
70
2230
8000
280
170
3420

AVERAGE DAILY TRAFFIC VOLUMES, 24 HOURS

SOURCE: NORTH CAROLINA STATE HIGHWAY COMMISSION

The preparotion af this report was financed in port thraugh a comprehensive plonning grant from the Deportment of Natural and Ecanamic Resources of the Stote of North Carolino.

3. There are several streets that deadend, such as Byrd Street, Westway Extension and Crest Lane.

4. There are a limited number of north-south collector streets.

5. Lack of off-street parking in the downtown area and along U. S. 64-70.

Recommendations:

1. Drexel should continue to strictly enforce its zoning and subdivision ordinances.

2. The Thoroughfare Plan of 1966 proposed an outer loop around Drexel to reduce congestion downtown and improve access to many tracts of land. This should be accomplished.

3. Realign Hill Street to connect with North Main Street.

4. Settlemyre Road should be extended in an easterly direction to connect with Mountain View Avenue, which would be extended to the east to connect with Mimosa Avenue.

5. A list of those streets that should be paved is as follows: The portion of Abee Street that runs in a westerly direction from Park Avenue; and "G" Street from Bryant Road to Dearborn Street.

6. The traffic island at the end of the Southern Railway bridge east of the center of Town should be landscaped and beautified for a more effective treatment.

7. The streets throughout the older sections need to be widened to an acceptable standard width, and curb and gutter installed on a systematic basis.

Water

The importance of a plentiful supply of clean water and an effective distribution system cannot be overemphasized. The Town of Drexel can and should use its water system to effectively guide development in desired directions.

The present filtration plant was constructed in 1938 on Howard's Creek. According to the report prepared by G. Eugene Smithson & Associates of Hickory, North Carolina, entitled "Comprehensive Water and Sewer Planning Report, Drexel, North Carolina", it has a design capacity of 650,000 gallons and an operating capacity of 685,000 gallons per day. Average daily consumption is 275,000 GPD and the peak demand during the summer months is 400,000 GPD. Storage consists of 500,000 gallons of ground storage at an elevation of 1,432 feet; a 100,000 gallon elevated tank with overflow at elevation of 1,377 feet; and 200,000 gallons of underground storage at an elevation of approximately 1,252 feet located under a 60,000 gallon elevated tank. Presently there are 680 water connections serving approximately 2,200 persons.

The Town of Drexel has water service available to all residents within the incorporated limits; however, there are areas that have inadequately sized lines. Also, potential growth and annexation areas will need to be served by water lines. Special attention needs to be given to Drexel Heights and Eastwood Homes. Much of Drexel's fringe areas are served by the Triple Community Water System which may curtail Drexel's potential for extending water lines beyond the town limits.

Recommendations:

Water service to Drexel Heights can be provided by a 6" diameter a.c. pipe from the 0.5 m.g. tank to Brandon Road. To serve the area, it will be necessary to purchase approximately 1,900 l.f. of 2-inch pipe and 1,050 l.f. of 4-inch pipe from the Triple Community Water Corporation at a prorated price based on a twenty (20) year straight line depreciation.

According to the Smithson report, water service to Eastwood Homes Subdivision can be provided by running a 6-inch diameter a.c. water line from the filter plant up Howard's Creek to the subdivision or from the filter plant along North Main Street to Amherst Road and along Amherst Road to the Subdivision. The study proposed that the line be placed along roads, although it will be more expensive. By doing this, property owners on both sides of the road from the filtration plant to the Eastwood Homes Subdivision can be served. This recommendation in the Smithson report also included the acquisition of certain Triple Community meters.

Sewer

According to the Comprehensive Water and Sewer Planning Report, Drexel, N. C., prepared by G. Eugene Smithson & Associates, the existing 500,000 GPD water filtration plant was constructed on Howard's Creek at the confluence with Secrets Creek in 1938. The system has 500 connections with a nominal daily loading of 330,000 gallons. It also has three pump stations. The stations at Valdese Avenue and Williams Road are 100 GPM while the one at Griffin Avenue is 200 GPM.

The Burke County 201 Facilities Plan has proposed the abandonment of the present wastewater treatment plant to be replaced with a new facility - The Lake Rhodhiss Water Pollution Control Center, serving both Drexel and Valdese. This facility, to cost $1.3 million, is now in the design stage with construction to begin in Fall 1977 pending the approval of several grants.

Problems include:

1. Oak Knoll Subdivision, annexed by the Town in 1963 is still without sewer service.

2. Home construction continues in Oak Knoll at this time.

3. Residents of Oak Knoll have experienced problems with septic tanks.

4. Eastwood Homes residents have substantial septic tank problems.

5. Surface waters from Eastwood Homes drain directly into Howard's Creek approximately 1,500 feet above the water plant intake.

Recommendations:

The Burke County 201 Facilities Plan has proposed that 10,900 l.f. of 15-inch diameter outfall pipe be laid along Secrets Creek from the wastewater treatment plant south to N. C. 114. Here it will be reduced to 12-inch diameter and then extend 4,900 l.f. along Secrets Creek to Mountain View Avenue.

Another line approximately 7,250 l.f. and 24-inch diameter has been proposed to extend from the treatment plant south to Main Street along Howard's Creek. From Main Street, the line size is reduced to a 12-inch diameter pipe for 7,250 l.f. to a point just west of Oak Knoll Subdivision. From here it is reduced to an 8-inch diameter pipe and extends 5,000 l.f. to U. S. 64-70.

Oak Knoll Subdivision is proposed to be served by a gravity collector system.

A random search in Drexel Heights indicates the existence of septic tank problems. The problem will be alleviated by the construction of a collector sewer system which will connect to the outfall-interceptor line along Secrets Creek.

The Smithson Report recommends that the Eastwood Homes Subdivision have a collector system that will tie into the proposed outfall line along Howard's Creek.

With the construction of the outfall lines along Howard's and Secrets Creeks, the existing pump stations at Valdese Avenue, Griffin Avenue, and Williams Road could be abandoned.

MANUFACTURING

About 9.4 percent of the developed acreage within the Town Limits is devoted to manufacturing uses, compared to 13.5 percent in 1966. As a generally accepted rule of thumb, the average town devotes about 10 percent of its developed acreage to manufacturing. This would seem to indicate that Drexel is lagging behind in industrial expansion relative to its overall development. Inasmuch as manufacturing represents the major livelihood of the Town, the lack of industrial expansion could seriously retard the future growth of the Town.

All of the manufacturing uses within the Town Limits of Drexel have developed in a rather compact manner and are located adjacent to the railroad tracks. In the past, manufacturing uses located in close proximity to railroads because such locations were desirable for shipping purposes. The modern trend for industrial uses is toward outlying locations where plenty of land in single ownership is available for one-story plants, expansion, parking and landscaping. This trend has not yet materialized in Drexel although several small industries have recently located in the fringe area. Some 18.17 acres, or 1.7 percent of the developed acreage in the fringe area, is devoted to manufacturing.

Within the Town of Drexel, there is room for expansion of the existing manufacturing uses to the west, but in other directions residential and other uses have been built in such close proximity as to prohibit expansion of the existing manufacturing uses. The roads proposed in the thoroughfare plan will, if built, provide better access to existing manufacturing uses and to these vacant parcels.

The majority of the manufacturing uses within the fringe areas are in the southern portion scattered along and in close proximity to U.S. 64-70. There are no industrial parks. There is abundant acreage suitable for industrial sites within the fringe area, and water is available in all districts except the northern quadrant. Sewerage facilities could be extended to areas within reasonable distance of the Town Limits. Access to vacant parcels is also better in the fringe areas than within the corporate limits. Rail facilities are available in the eastern and western quadrants of the fringe area. It will suffice to say that the fringe area has as many advantages to offer prospective industrial clients as does the Town, but it would be expensive to extend water and sewer lines to scattered industrial plants in the fringe areas.

After considering industrial sites and uses within the Drexel Planning Area, the major problems are described as follows:

1. Lack of prime industrial sites within the Town Limits.

2. Access problems of existing manufacturing uses within the Town Limits.

3. Lack of good access to vacant fringe area parcels.

4. Absence of a local group or commission responsible for attracting new industry to the area.

Recommendations:

1. Annexation to the north to provide prime industrial sites.

2. Extension of water and sewer services to northern quadrant of the fringe area.

3. Improve circulation system as outlined in the Thoroughfare Plan.

4. Establish a local Industrial Development Commission to attract new industry. This effort should begin in 1977-78 after the local labor market and economy have stablized following the recent recession. These industries should be "dry" industries in order to conserve the existing wastewater capacity.

COMMERCIAL

Commercial land uses are establishments supplying commodities to the general public at retail or wholesale, businesses, professional and governmental services which supply general needs of an intangible nature to the public. Commercial uses in Town occupy only 1.3 percent of the total developed acreage; within the fringe area 2.1 percent of the developed acreage is utilized for commercial uses. The bulk of the commercial acreage within the Town Limits is located downtown from south of the railroad tracks to Church Street, although several small establishments are interspersed among the residential neighborhoods in the Town.

The downtown area is characterized by rundown and vacant buildings. There is also a lack of off-street parking; on-street parking is allowed. The desirability of the downtown area is further diminished by its lack of retail facilities, (e.g. hardware store, jewelry store, etc.). This is not a land use problem as such, but there must be a variety of retail outlets available to entice customers to come to downtown Drexel to shop.

The majority of commercial uses in the fringe areas are located along U. S. 64-70 and are of the ribbon or strip development type. Some of these businesses have failed to provide adequate setbacks from the highway and off-street parking, adding to the congestion found along U. S. 64-70.

It must be remembered that Drexel's close proximity to the larger communities of Morganton and Valdese substantially reduces the retail and services market for Drexel. However, the "aggressiveness" of the local merchants can determine to a large extent the amount of business they will get. The local government can only do so much in providing off-street parking and other amenities. The local merchant will have to undertake the initiative in refurbishing their businesses and expanding the variety of their services.

Governmental offices for Drexel are found in the Drexel Town Hall located on South Main Street. The Town Hall was constructed in 1938 and houses the office of the Town Clerk, and serves as headquarters for the Police and Fire Departments. In addition, the Town Hall serves as an operations center for all other municipal services including water, sewer, electrical, street and sanitation services.

Due to its small size, heavy usage, limited storage space, lack of off-street parking facilities and lack of room for expansion, it is considered inadequate. Plans are now underway for a new Town Hall to be built on a site adjacent to the Post Office on Church Street. This location will permit the Town Hall to maintain its accessibility to all citizens.

Problems include:

1. Lack of adequate off-street parking in the downtown area.

2. The run-down appearance of some buildings; vacant buildings.

3. Lack of certain retail outlets in the downtown area.

4. The Town Hall containing the Clerk's Office and Police and Fire Department is inadequate in every respect.

Recommendations:

1. The Town should provide additional off-street parking along the east side of South Main Street.

2. The Town should work with local Central Business District merchants and owners to improve the appearance of the central area of Drexel and to carry out a program of cooperation under which the Town will provide design for the fronts and backs of stores and the owners will make the actual improvements.

3. Continue street enforcement of the zoning ordinance to guide the growth of strip commercial development and assure adequate off-street parking and proper setbacks.

4. Proceed with present plans to build a new Town Hall on the vacant lot beside the Post Office.

SOCIAL AND CULTURAL

Included in this category are religious establishments such as churches, including accessory buildings and grounds; recreational uses such as parks and playgrounds, golf courses, tennis courts and swimming pools; schools and educational establishments including their grounds; and social establishments such as fraternal organizations.

Social and cultural land uses accupy 11.2 percent of the developed acreage within Drexel. This is a fairly high percentage and shows that emphasis has been placed on facilities that affect the physical and spiritual needs of the community. About 7.6 percent of the fringe area and 6.3 percent of the total planning area have been devoted to social and cultural uses.

Schools

When the Community Facilities Plan was prepared in 1967, there were only two schools in the Planning Area; there are now three schools and these are all within Drexel's Town Limits. These schools are part of the Burke County School System. The additional building houses kindergarten through third grade and is located behind the Community Center at the corner of Park Avenue and Alta Vista. Grades 4-6 are housed in a building on Main Street south of School Street, while the Junior High is also on Main Street, north of School Street. See Map 3 for the location.

The Elementary School site is outdated, but within the next year an additional eleven classrooms will be opened at the building housing the K-3 children. These additional classrooms will be for elementary students. The Junior High School is also inadequate, and long range plans are for a new Junior High School between Valdese and Drexel, probably within ten (10) years.

Enrollment figures and a description of the school plant facilities follow:

DREXEL SCHOOL DATA 1975-76

	Year Built	Grades	No. of Classrooms	1975-1976 Enrollment	Pupils Per Classroom
Kindergarten & Drexel Primary	1956 Addition 1966	K-3	12 (permanent) 6 (temporary)	781	21.7
Drexel Elementary	1924	4-6	18		
Drexel Junior High	1942 Additions 1961 1963	7-9	16	395	24.7

Source: Dr. Clyde Shuping, Burke County School Superintendent.

It would appear that on a pupils-per-classroom basis, the schools are adequate, but this is not the case. A school survey for Burke County in 1963 by the Division of School Planning, North Carolina Department of Public Instruction, stated that the 18 classrooms of the Elementary School, built in 1924, are inadequate and should be taken out of use. Plans are for this building to be phased out and eventually demolished. This will probably take place within the next five years.

The Junior High School, which has a library, music building, cafeteria, and gym, and leases a building for vocational training, was formerly the Drexel High School building. The High School was consolidated and the students now attend East Burke High School located in Icard, North Carolina.

RECREATION

Drexel's Community Center is the only public recreational facility other than school playgrounds in the Planning Area. With the exception of a small contribution from the Town of Drexel, funding and administration is from the Drexel Foundation.

The Center is located on a site of about forty acres just west of South Main Street. The building has a total of 26,000 square feet of floor space devoted to a diversity of recreation uses; such as, ping-pong, a gymnasium and game rooms, kitchen facilities, and meeting rooms are also provided. A football and baseball field and a picnic area are also located on the site.

The National Recreation Association has an accepted standard for measuring the adequacy of recreational acreage which is one acre of park or playground for every one hundred persons. With Drexel's population currently estimated at 1,590 persons, it has adequate acreage to meet the standards. By 1995, the population of the Town is projected to be 1,958, so the present acreage should be adequate.

Although the acreage is adequate, all of it is concentrated at the Community Center. It is felt that "tot lots" or neighborhood playgrounds are needed in other areas of Drexel. Four such sites have been proposed.

1. Where the Town Hall is now located after it is replaced.

2. In the same lot as the Town's Warehouse and Water Tank which are located on Settlemyre Road.

3. On North Main Street in the materials storage area.

4. In a vacant area of almost four acres, located south of the intersection of Settlemyre Road and Poteat Street. This would give the west side of Town a neighborhood-type facility and should be equipped with swing sets, slides, see-saws and similar type equipment.

Recommendations:

The Town should purchase the aforementioned recreation sites. They should be programmed for purchase in fiscal years 1976-1977 and 1977-1978 and equipped shortly thereafter.

RESIDENTIAL

Land uses in this category are structures used as homes for human habitation such as single-family, two-family, multi-family or apartments, seasonal homes or cottages and mobile homes.

Residential land use is by far the largest land use within Drexel and its fringe areas. Sixty-three percent of the total developed land within the Town Limits is occupied by residential uses, and the figures for the fringe area and the total planning area are 60.9 percent and 61.7 percent respectively. The growth of acreage committed to residential uses within the Town Limits of Drexel has been substantial between 1966 and 1975, largely due to the annexation of a residential neighborhood, extending the southwestern boundary of the Town. The direction of residential growth within the Town recently has been predominantly northeast and southwest and in the Oak Knolls Subdivision. Areas of residential growth in the fringe areas have been mostly south; southwest, in the Eastwood Subdivision; and along S. R. 1512.

It should be noted that many of the new housing units that have come into existence since 1966 have been mobile homes. In 1966 there were more residential structures in the fringe area (862) than in the Town Limits (387). In addition, there were 42 and 47 mobile homes in the Town Limits and fringe area respectively. In 1975 there were 521 dwelling units in the Town Limits with 55 mobile homes; the fringe area had 1,181 residential structures with 206 mobile homes. This is a 193 percent increase in the number of mobile homes in nine years. This growth in mobile homes can generally be attributed to an inadequate supply of low-income housing. While mobile homes help fill this void, rapid growth of mobile home parks can lead to haphazard locations and unsanitary conditions. Care should be taken through the strict enforcement of all the applicable ordinances and regulations to insure that mobile home parks are provided with sanitary facilities, proper space requirements, and protection from noise, incompatible land uses, etc.

Another important aspect of residential land use is housing quality. Housing conditions in the Drexel Planning Area were evaluated for the purposes of this report through a "windshield survey". A brief description of the criteria used to evaluate housing quality is as follows:

Standard: Structures with only slight visible defects and these are normally corrected during the course of regular maintenance. Examples of slight defects are: lack of paint, small cracks in exterior of chimneys, cracked windows, and broken gutters or downspouts.

Substandard: Structures that need more repair than would be provided in the course of regular maintenance. Such structure has one or more defects of an intermediate nature that must be corrected if the unit is to continue to provide safe and adequate shelter. Examples of intermediate defects are: holes or open cracks; rotted, loose, or missing materials over a small area of the foundation, walls or roof; shaky or unsafe porch steps or railings; several broken or missing window panes; and small areas of broken or loose roofing.

Deteriorating: Structures that do not provide safe and adequate shelter and in their present condition endanger the health, safety, or well-being of the occupants. Defects are either so critical or so widespread that the structure should be rebuilt or torn down. Examples are: holes or open cracks; rotten or loose material (siding, shingles, bricks, concrete, tile, etc.) over a large area of the foundation; sagging floors, walls, or roof; and extensive damage by storms, fire, floods and so forth.

Tables 5 and 6 give the number and percentage of dwelling units within each classification for the Town Limits and fringe area by housing type. Map 3 shows the location of substandard housing.

HOUSING CONDITIONS, DREXEL, NORTH CAROLINA
BY TYPE: TABLE 5

	Town of Drexel			One-Mile Planning Area			- Total Planning Area		
	Single-Family	Multi-Family	Mobile Homes	Single-Family	Multi-Family	Mobile Homes	Single-Family	Multi-Family	Mobile Homes
Standard	372	31	46	714	16	195	1,086	47	241
Substandard	44	8	5	201	0	11	245	8	16
Deteriorating	11	0	4	44	0	0	55	0	4
Sub-Totals	427	39	55	959	16	206	1,386	55	261
Total Units		521			1,181			1,702	

Source: T.P.A. Windshield Survey, November, 1975.

HOUSING CONDITIONS, DREXEL, NORTH CAROLINA
BY PERCENTAGE: TABLE 6

	Town of Drexel		One-Mile Planning Area		Total Planning Area	
	Number of Structures	%	Number of Structures	%	Number of Structures	%
Standard	449	86.2	925	78.3	1,374	80.7
Substandard	57	10.9	212	18.0	269	15.8
Deteriorating	15	2.9	44	3.7	59	3.5
Totals	521	100.0	1,181	100.0	1,702	100.0

Source: T.P.A. Windshield Survey, November, 1975.

It can be seen from Table 6 that only 2.9 percent of the Town's housing is considered unfit for human habitation. The comparable figures for the fringe area and total planning area are 3.7 percent and 3.5 percent respectively. The housing in this group should be demolished and its occupants relocated into standard housing. The percentage of substandard housing (10.9 percent in the Town and 15.8 percent for the total planning area) is not abnormally high; however, measures should be taken to prevent further deterioration of these dwelling units. It is recommended that within the corporate limits the minimum housing codes of the Town of Drexel be strictly enforced for this purpose.

Problems associated with residential land use in Drexel include:

1. An inadequate supply of low-income housing.

2. A number of substandard and deteriorating dwelling units.

3. Lack of good building sites for residential construction within the Town Limits.

4. Failure of the Town to annex.

Recommendations:

1. The Department of Housing and Urban Development has approved 50 units of Section 8 elderly housing to be built in Drexel, of which 24 one-bedroom apartments are scheduled to begin construction in the 1976-1977 Fiscal Year. As these units will significantly add to the supply of low-income housing, it is recommended that Drexel proceed with the construction of these units.

2. The Town of Drexel should continue to enforce its minimum housing code and zoning ordinance, and encourage proper maintenance of residential property within the planning area.

3. The Town should consider the annexation of areas programmed in the Land Development Plan.

4. Other recommendations are offered in the forthcoming 701 Housing Element for Drexel.

LAND USE STANDARDS AND PRINCIPLES

Civic leaders are confronted with development decisions daily. If these decisions are to result in a more aesthetic and economic urban environment, they must be based on a set of standards guiding proper community development. Each type of land use has its own set of planning principles and standards to which it should adhere. For the purpose of this report, land has been divided into five categories (residential, commercial, industrial, transportation and utilities, and social and cultural). Good planning standards and principles for each classification are listed below:

RESIDENTIAL

Locational characteristics for this type of land should possess the following attributes:

A. Should be large enough to maintain its integrity as a residential area and to prevent encroachment of incompatible land uses.

B. Topography should have enough slope to give the land character, provide good drainage, and be free from the danger of flooding, but the slope should not exceed 15 percent.

C. Should have easy accessibility to employment, shopping and cultural activities.

D. Protection should be provided to the area from heavy traffic and incompatible land uses.

E. Residential development should be encouraged within the Town Limits to make use of existing undeveloped land and to insure that the extension of utilities will not be costly or unreasonable.

COMMERCIAL

Commercial land use in the planning area can presently be divided into two categories: the Central Business District and strip commercial developments. There are also businesses scattered in the residential areas, but no groupings that could be defined as a shopping center. However, principles and standards will be listed for neighborhood shopping centers.

The Central Business District should provide:

A. Adequate and separate circulation systems for vehicles and pedestrians.

B. Off-street parking and loading facilities.

C. Adequate land for green space as a means of buffering adjoining incompatible land uses.

Neighborhood shopping centers provide convenience goods such as foods, drugs and personal services. Neighborhood shopping centers should contain the following qualities:

A. A site of sufficient area to serve the neighborhood and provide off-street parking space.

B. Ready accessibility by means of major thoroughfares.

C. Buildings should be grouped so as to operate as one functional unit.

D. Truck traffic and loading facilities should be separated from customer traffic.

Strip commercial districts usually involve a variety of commercial enterprises located on major arteries. This type of development tends to decrease the traffic-carrying capacity of the street upon which it fronts. Strip commercial development should possess the following attributes:

A. Provide only those services necessary to the traveling public.

B. Be of sufficient size to provide off-street parking and have entrances and exists which do not impede traffic on the major transportation artery.

C. Clustering of these units which is preferable to intermingling them with incompatible uses.

D. Buffer zones should be provided to protect incompatible land uses.

INDUSTRIAL

The areas programmed for industrial use should have the following attributes:

A. Sites located on land with a slope of preferably not more than five percent.

B. Near major transportation facilities such as highways, railroads and/or airports so as to provide access for employees and the distribution of materials and products.

C. Utilities of sufficient capacity.

D. Off-street loading facilities so as not to congest traffic on surrounding streets.

E. Adequate landscaping and buffer zones.

F. Off-street parking facilities and sufficient allowance for future plant expansion.

TRANSPORTATION AND UTILITIES

Streets

A brief definition of each type of street follows, and qualitative features are described:

Local Streets comprise those which are designed only to service the traffic volume of the local area involved. These areas may serve either residential, commercial, or industrial areas.

Collector Streets serve the function implied by their name. Land access should be a secondary function of collectors.

Arterials function to move traffic, and land access should be a secondary function of arterials.

Freeways are high speed roads that are access-free and have grade separation interchanges. Freeways have only one function -- to carry traffic.

The circulation system of Drexel should conform to the following basic principles:

1. Collector, arterial, or freeway-type arteries should follow the boundaries of residential neighborhoods rather than crossing them internally.

2. The circulation system should be coordinated with those of adjoining cities and with the State system of highways.

3. Streets and rights-of-way should conform to the following standards:

	Right-of-Way	Width
Local streets	50- 60 feet	24-48 feet
Collector streets	60- 80 feet	40-48 feet
Arterial streets	100-200 feet	48-60 feet
Freeways	150-200 feet	48-60 feet

4. Abutting property on major thoroughfares should be provided with marginal access roads.

5. Major and secondary roads should be landscaped on both sides whenever possible.

Public Utilities

The qualitative aspects of public utilities change with increasing urbanization. Examples of these changes would be conversion from septic tanks to a public sewerage system and from wells to a municipal water system. Four major categories of public utilities will be discussed.

Water Supply

1. Water should be free from bacteriological and other contamination.

2. It should be clean, colorless, odorless, and pleasant to the taste and contain a moderate amount of soluble mineral substances.

3. Catchment areas and reservoirs should be reserved well in advance of required development.

4. The water distribution system should assure continuity of service for domestic, industrial and fire fighting purposes.

Refuse Disposal

1. Kinds and types of refuse to be collected should determine the type of refuse disposal unit utilized.

2. Careful selection of disposal sites will help in minimizing land use conflicts.

Sanitary and Storm Sewers

1. Sewerage systems should be provided where land is divided into lots of less than one acre.

2. The lines should be of sufficient size and stub outlets should be provided.

3. It is desirable to have both sanitary and storm sewers and not a "combined system".

4. Cooperation between governmental jurisdictions is desirable where gravity flow is influenced by the topography of several areas.

5. Storm sewers should be designed so that infrequent storms will not result in flooding.

Electric Power and Gas

1. Along streets that are to be paved, it is desirable to install house connections from underground utility lines to the curb before the street is surfaced.

2. Conductors should be placed in underground conduits, and adequate records should be kept of all underground facilities.

3. Adequate supply and distribution systems should be available for heavy industrial uses.

SOCIAL AND CULTURAL

A. Should be convenient and accessible to the people who use them. Uses serving the entire community should be centrally located.

B. Should be acquired in advance wherever practical. Also, sites should be adequate for expansion of the facility and for parking.

Beyond these two general criteria, it will be necessary to break down this category into its major components: (1) schools, (2) recreation, and (3) public buildings.

Schools

The North Carolina Department of Public Instruction, Division of Advance Planning, recommends the following minimum school site sizes:

	Students	Site in Acres
Elementary School	400 or less	10
One-half mile service area	500 to 600	12
	800 (max. size)	15
Secondary School	400 or less	12
Two-mile service area	500	14
	600	16
	800	20
	1,200	24
	1,400	28

Recreation

This category covers playgrounds, playfields, parks, and other open spaces. The following concepts should be adhered to in planning recreational areas:

1. The site should be properly sized and located for efficient operation and maintenance. It should be quiet, clean, safe and protected from strong winds, heavy traffic, and undesirable developments.

2. Sites acquired in developed areas should entail the least demolition of buildings and dislocation of families.

3. Active recreation areas should be separated, either externally or internally, according to the age groups that will use them and be easily accessible to the public.

4. Recreational facilities should be combined with school facilities to serve as educational and recreational centers for neighborhood or groups of neighborhoods.

Public Buildings

This category includes those types of buildings used for the conduct of government and the furnishing of essential public services. They may be constructed and operated by city, county, state or federal governments, or by a semi-public agency. Some of the qualitative requirements are as follows:

1. Location should be where they function effectively and yet fit into the general plan.

2. Central-type buildings, e.g., Town Halls and libraries, should be accessible from all parts of the city.

3. The design layout should take into account the future growth of the services furnished, adequate parking, employee facilities, general utilities, public comfort, and aesthetic qualities.

THE LAND DEVELOPMENT PLAN

The Land Development Plan is not to be taken as a rigid mold into which future development must fit, but rather, it is a general guide to assist in formalizing policies which affect land development. It represents a process rather than an overall product, for land use planning must be a continuing community activity. No amount of study and research will enable us to foretell changes in technology and living habits for the next twenty years. Therefore, the Land Development Plan, as described in this section of the report, is not presented as a picture of Drexel in 1995. It depicts the Town in the future based on the technology and living habits of today.

FUTURE LAND USE PROJECTIONS

The projection of future land use requirements is not an exact science but is an "educated guess" based on past trends. Land use requirements for the projected population gains are added to present land use deficiencies, if any, and the net result is the acreage requirement by land use categories for the planning period. The technique used to determine future land use requirements was the "acres per hundred method."
(Town of Drexel)

The future land use projections for the area within the Town Limits of Drexel is shown in Table 7. Two hundred (200) acres will be needed to accommodate the 502 person increase in population that is expected for the Town by 1995. This increase includes future acreage needs for all land use categories based on the minimal population increase projected. Drexel presently has only 150 acres available for development within its corporate limits. This suggests that annexation is necessary if Drexel is to continue to grow at its past rate. Assuming that the Town will annex, 282 acres have been programmed to accommodate additional land requirements that may result from a population increase that is higher than expected. A discussion follows giving specific reasons why the planned acreage for 1995 is higher than the acreage needed to accommodate the projected increase by 1995.

Transportation

Thirty acres will be needed to accommodate the expected population increase, but 45 acres have been planned for this category. It is believed that the construction of new streets programmed in the thoroughfare plan will utilize the planned acreage.

Manufacturing

Eighteen acres are needed to serve the expected population increase, but 60 acres have been planned for use by 1995. In recent years, industrial expansion has lagged behind

the overall growth of the Town. If Drexel is to grow, it must have ample acreage available to attract potential industries. It is felt that 60 acres will provide sufficient acreage within the Town Limits to meet the demands of future industries or any expansion of existing industries.

ACREAGE PROJECTIONS
TOWN OF DREXEL, NORTH CAROLINA: TABLE 7

Category	Developed Acres in Town	Acres Per 100 Pop. Now	Add. Acreage by 1985 203 Pop. Inc. 1975-1985	Acres Needed by 1995 209 Pop. Inc. 1985-1995	Planned Acres For Use by 1995
Transportation	94.16	5.92	11.80	17.70	45.00
Manufacturing	58.90	3.70	7.40	11.10	60.00
Commercial	8.33	.52	1.00	1.50	5.00
Social/Cultural	69.90	4.39	8.80	13.20	22.00
Residential	395.14	24,85	49.80	74.70	150.00
Totals	626.43	39.40	78.80	118.20	282.00

Source: Traffic and Planning Associates, Inc.

Commercial

This category, according to population projections, will need only 2.5 acres for expansion. However, five acres have been allotted for commercial use. This additional acreage should be utilized for the addition of off-street parking and expansion of existing businesses.

Social and Cultural

Twenty-two acres will be needed to accommodate projected population, and this amount is also the planned acreage. The land for construction of a new Town Hall and storage yard, and the provision of additional recreational facilities (tot lots) are included in this category.

Residential

Approximately 125 acres are needed to accommodate the projected population increase, but 150 acres have been programmed. Because of the large lot sizes that now prevail in the area, it is felt that the programmed acreage is justified. Included in this category is the acreage needed for the aforementioned 24 units of Section 8 elderly housing.

Considering all factors, it seems reasonable that 282 planned acres will be needed for future land use needs or 82 more acres than the 200 acres based wholly on projected population increases. Once again, it should be noted that this acreage is not available within the present boundaries of Drexel and annexation will be necessary if the Town is to grow at its projected rate.

(Drexel's One Mile Perimeter)

Table 8 shows that about 352 acres will be needed for the 1,137-person increase projected for the fringe area by 1995. However, 652 acres have been planned for future land use. While this figure is much larger than the acreage needed for the projected population increase, there are factors which justify this planned acreage. The following discussions of these factors by land use category explain why the planned acreage is much higher than the acreage needed to accommodate the 1995 projected population.

Transportation

About 97 acres are needed based on population projections, but 105 acres have been planned for this category. The additional acreage will be utilized for the construction of the streets proposed in the thoroughfare plan.

Manufacturing

About 6 acres will be needed to accommodate the projected population increase, but 190 acres have been programmed. Although this figure is high, it is felt that industrial development in the Drexel area will occur in the fringes and sufficient acreage should be available for this growth. Water is provided to the majority of the fringe area and the Drexel area generally has good access. Large amounts of industrial land in addition to the availability of utilities and good access will aid the efforts of the Town in attracting new industries to the area.

Commercial

About 30 planned acres have been allotted for this category, although only 7 acres are needed for the projected population increase. The majority of new businesses in recent years have located in the fringe area and it is felt that this trend will continue. There is a good possibility that a shopping center will locate in the fringe area; therefore, additional business property has been programmed.

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TOWN OF DREXEL

BURKE COUNTY, NORTH CAROLINA

DATE: NOV., 1975

BY: TRAFFIC AND PLANNING ASSOCIATES, INC.

MAP 5

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500 0 500 1000

SCALE IN FEET

LAND DEVELOPMENT PLAN

Legend

Existing Land Use

- LOW TO MEDIUM DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- INDUSTRIAL
- COMMERCIAL
- SOCIAL / CULTURAL

Proposed Land Use

- LOW TO MEDIUM DENSITY RESIDENTIAL SHORT RANGE
- HIGH DENSITY RESIDENTIAL SHORT RANGE
- INDUSTRIAL
- COMMERCIAL
- SOCIAL / CULTURAL
- LOW DENSITY RESIDENTIAL LONG RANGE

Development After 1995

- RESIDENTIAL
- INDUSTRIAL
- COMMERCIAL

Thoroughfares

- EXISTING MAJOR THOROUGHFARE
- EXISTING MINOR THOROUGHFARE
- PROPOSED THOROUGHFARE

The preparation of this report was financed in part through a comprehensive planning grant from the Department of Natural and Economic Resources of the State of North Carolina.

Social and Cultural

Twenty-seven acres will be needed to accommodate the projected population increase and this is also the planned acreage. Included in this category is the acreage needed to develop the water and sewage lines proposed in the Comprehensive Water and Sewer Planning Report, Drexel, North Carolina prepared by G. Eugene Smithson and Associates.

Residential

Three hundred acres have been planned for residential growth, but 216 acres are indicated by the population projections. The availability of water in the fringe area will provide an impetus to growth. The majority of the new residential growth has taken place within the fringe areas, and this trend is expected to continue.

The land now developed in the Drexel Planning Area includes areas of small residential lots, stores without parking, multi-story plants as opposed to single-story plants. The standard and style of development in the next twenty years will use a lot more land than the standards and styles used to build the Town that now exists. All of the above factors show that land use projections cannot be based wholly on population, but must include growth patterns, provision of utilities, contemplated and known expansions, and street construction. Considering all factors it seems reasonable to program 934 acres, or 25.6 percent of the total undeveloped acreage within the planning area for development by 1995. The remaining portion of the planning area (2,700 acres) has been programmed for its best use, but will probably not develop until after 1995. Map 5 presents the Land Development Plan in graphic form.

It should be noted that annexations to the Town will expand the Planning Area and additional land use studies may be required to determine the best land use for these additional areas.

ACREAGE PROJECTIONS
FRINGE AREA OF DREXEL: TABLE 8

Category	Developed Acres in Fringe Area	Acres Per 100 Pop. Now	Add. Acreage by 1985 457 Pop. Inc. 1975-1985	Acres Needed by 1995 680 Pop. Inc. 1985-1995	Planned Acres For Use by 1995
Transportation	303.50	8.50	38.80	57.80	105
Manufacturing	18.17	.51	2.30	3.40	270
Commercial	23.09	.65	3.00	4.40	30
Social/Cultural	83.07	2.33	10.50	15.60	27
Residential	667.27	18.68	86.80	129.20	300
Totals	1,095.10	30.67	141.40	210.40	652

Source: Traffic and Planning Associates, Inc.

INDUSTRIAL DEVELOPMENT

There is only one large existing industrial site within the Drexel Planning Area and additional acreage has been programmed for the future expansion of this site. In addition, another large vacant area has been programmed for future industrial growth. Following is a discussion of existing and proposed industrial sites.

Proposed Industrial Sites

Site 1 - This industrial site of about 160 acres is located west of North Main Street and runs in a corridor north and south of the Southern Railroad tracks to State Road 1522. This land is very level and topography should pose no problem. The developed portion of this tract contains about 20 acres and is occupied by a furniture manufacturer and a textile concern. About 120 acres are vacant and can be developed. Accessibility to this area would be greatly improved by the construction of the proposed outer loop around Drexel. "Water" is available to the entire tract and "sewerage" to that portion located within the Town Limits. Railroad facilities are also available.

Site 2 - West of S. R. 1712, south of S. R. 1525 and east of Overlook Drive lies a site of about 140 acres which has been programmed for future industrial use. This site is level and there are no topographic problems. At the present time, this entire tract is undeveloped. "Water" is available to the tract, but "sewerage" is not. Accessibility is provided by the aforementioned streets, and the proposed realignment of S. R 1712 in a southerly direction would improve accessibility to this site. This site has the additional advantage of being in close proximity to Interstate 40, and would provide Drexel with "prestige" industrial sites near a major highway for such uses as wholesaling, warehousing, truck terminals, and inoffensive fabricating or processing plants. It should be noted that there are also some good industrial sites located along Interstate 40, outside of the Drexel Planning Area. However, access to these tracts is limited because Interstate 40 has no marginal access road and utilities would have to be made available.

About 270 vacant acres have been programmed for industrial purposes, 260 acres in the above sites and the remaining 10 acres in scattered sites throughout the planning area. This should provide ample acreage for industrial growth within the planning period. There are advantages in an abundance of industrial land. It gives the potential developer an assortment of sites to choose from, and it also provides a reserve in the event industrial expansion occurs at a faster than expected rate.

COMMERCIAL DEVELOPMENT

Commercial development is an integral part of the physical and economic development of Drexel. There are desirable and undesirable locations for the conduct of commercial enterprises. The negative aspects of past commercial development have been covered in a previous section of this report and recommendations for their alleviation have been made. The following paragraphs will discuss the types of businesses and suggested locations for each type.

Community Shopping Areas

This type of business tends to cluster and is suitable for location at major intersections. Examples of these businesses are food and drug stores, barber and beauty shops, dry cleaners and launderettes. Enforcement of the zoning ordinance is needed to insure that sufficient off-street parking is provided, adequate setback and side yards are provided, off-street loading and unloading facilities are provided, and that adequate landscaping and buffering are provided. Following is a discussion of the community shopping areas within the Drexel Planning Area.

Site 1 - This site, containing about 5 acres, is the downtown area in Drexel. Its problems were discussed in a previous section and recommendations were made for their alleviation. Approximately 2 acres have been programmed for future business growth, and the majority of this proposed acreage should be used for additional off-street parking.

Site 2 - About 4 acres have been programmed south of the intersection of S. R. 1525 and U. S. 64-70. A service station occupies a portion of this site. It is felt that this site could be developed and used as a shopping area by the urbanized areas located in the western quadrant of the fringe area.

Site 3 - The area northeast, northwest, and southwest of the intersection of S. R. 1525 and U. S. 64-70 (not to be confused with Site 2 as S. R. 1525 has two intersections with U. S. 64-70) is a community shopping area. It is now occupied by a service station, grocery store and restaurant. About 7 vacant acres have been programmed for additional business use and associated parking.

Site 4 - The area located northeast, northwest, and southwest of the intersection of South Main Street and U. S. 64-70 is occupied by a grocery store and restaurant. About 8 acres of vacant land is included within this area. Realignment of the southern portion of South Main Street will improve accessibility to the vacant portion of this area.

Site 5 - The area located northeast of the intersection of S. R. 1501 and Propst Road (S. R. 1512) has been programmed for business use. Residential development is strong in in this area and it is felt that soon a community shopping center will be needed in this area to serve the needs of the expanding population.

Highway Service Areas

Businesses of this type are those which tend to locate along major thoroughfares and are automobile oriented. The buildings located in this area are normally freestanding. Examples of this type of business are service stations, motels, and drive-in restaurants. Zoning should provide development standards for this type of business. It should be noted also that highway service areas require more land because the buildings are freestanding, and do not usually cluster. The Land Development Plan delineates the following highway service areas within the Drexel Planning Area.

Site 1 - This site is located north and south of U. S. 64-70 in close proximity to Community Shopping Area 2. A portion of it is now occupied by a building supply firm and a monument sales yard. This area includes some substandard housing which could be razed and used for business property. About 3 acres of this area are vacant.

Site 2 - Southeast of the intersection of South Main and U.S. 64-70 is a highway service area. A portion of it is now occupied by a drive-in theater, service station and a mobile home display lot, and a TV repair shop. There is also substandard housing in this area that could be razed and used for business uses. This area contains about 7 vacant acres.

Site 3 - This site located south of U.S. 64-70 is occupied by an automobile sales lot and a farm implement company. About one acre of this tract is vacant.

About 35 acres of vacant land have been programmed for future business growth within the planning period. It is also felt that the proposed locations for business sites will not excessively impede the movement of traffic along U.S. 64-70.

SOCIAL AND CULTURAL AREAS

The provision of social and cultural facilities for the Drexel Planning Area is very important to its spiritual, mental and physical growth. Unlike the other uses, however, social and cultural uses are normally considered to be compatible with residential areas.

School Facilities

School facilities have already been discussed and the three Drexel schools have an acreage deficiency of 9.5 acres. However, measures are already being taken to correct these deficiencies, namely eleven new classrooms for elementary students at the Drexel Primary School and long-range plans for a new Junior High School to be located between Drexel and Valdese within the next 10 years. Therefore, no additional school sites have been programmed.

Park Facilities

The existing recreational facilities in Drexel are adequate, but there is a need for neighborhood type facilities. The following park sites for future utilization have been provided in the plan.

Site 1 - Where the Town Hall is now located after it is replaced.

Site 2 - In the same lot as the Town's warehouse and water tank which are located on Settlemyre Road.

Site 3 - A site on N. Main Street in the materials storage area.

Site 4 - A vacant area of almost 4 acres, located south of the intersection of Settlemyre Road and Poteat Street. This would give the west side of Town a neighborhood-type facility and should be equipped with a swing set, slide, see-saw and similar types of recreational equipment.

Public Buildings

As previously mentioned, the Town plans to build a new Town Hall and police and fire departments. A site has already been chosen, namely the vacant lot beside the Post Office on Church Street. Also being planned is a new Town Garage and Storage Yard on a two-acre site along Park Avenue.

RESIDENTIAL DEVELOPMENT

Growth of residential areas is reflected both as a filling in of vacant lands and the creation of new subdivisions in outlying areas of Drexel. The Land Development Plan illustrates strong residential growth during the planning period. In locating residential areas, a number of factors were considered. The suitability of land for septic tanks was examined as well as the availability of water and sewer service. Accessibility was given prime consideration.

The Land Development Plan proposed three types of residential development: low-density long-range, low-to-medium density short-range and high-density short-range.

Low-Density Long-Range

The areas programmed for this type of development are located in the fringe area and are not serviced by water and sewer. The density of these areas should not be more than two dwellings per acre. This is the maximum allowable density when septic tank must be utilized. Residential development in this type of area is usually single-family detached. Parts of this area can also be utilized for mobile home parks.

Low-to-Medium Density Short-Range

This type of residential development should be located adjacent to main shopping areas or within a reasonable distance of the Central Business District. The residential areas of this type, delineated in the Land Development Plan are served by water but only the portions located within the Town limits are served by sewerage facilities. Emphasis is primarily on single-family dwelling and duplexes and lot sizes should range from 12,000-15,000 square feet. A large portion of this type of residential development is located outside the Town limits of Drexel but is served by a private water system.

High-Density Short-Range

These residential areas are usually in close proximity to the center of town, where they will probably develop with a density of 10 to 14 families per acre. Single-family

dwellings, duplexes and apartment houses can be expected to develop in this area. The minimum size lot for single-family dwellings should be 10,000 square feet, which is a little high for a high-density area. However, the majority of the vacant lots within the Town of Drexel are of this size. Lots for duplexes and multi-family dwellings would require additional square footage according to a sliding scale. The development pattern in these areas will probably not be in the nature of land subdivision because there is little vacant land available. The majority of new construction will probably take place on existing individual lots. Some of these lots can also be used for the parking of mobile homes. These residential areas are also where the majority of any low-income housing development will take place.

Thoroughfare Plan

A Thoroughfare Plan was outlined for Drexel in the 1966 Community Facilities Plan prepared by the Division of Community Planning and this plan is still appropriate for the present. A few of its major points are summarized below and shown on Map 5.

1. An outer loop has been proposed which will carry traffic around the Town without going through urbanized areas. This outer loop will also provide better access to some tracts of land, thereby making it more feasible to develop the outskirts of Drexel. The center loop starts in the east side of Town at the intersection of U.S. 64-70 and Enon Road, and runs in a northeasterly direction with Secrets Creek and crosses Oakland Avenue, then bearing west crosses State Road 1536 to Dearborn Street. It then runs in a southerly direction crossing Williams Road, Powell Road, Main Street, Reed Street, and terminates at the intersection of Settlemeyer Road and Poteat Drive.

2. The realignment of Hill Street in a northerly direction to connect with North Main Street.

3. The extension of Settlemeyer Road in an easterly direction to connect with Mountain View Road, which would be extended to the east to connect with Mimosa Avenue.

4. The realignment of State Road 1713 at its intersection with State Road 1716. This will eliminate a very awkward intersection.

5. The realignment of State Road 1728 at its crossing with the Southern Railroad.

Other existing thoroughfares, which have been programmed as major thoroughfares, such as State Road 1712 and State Road 1529 will require some construction work such as widening and removal of bad curves to bring them up to acceptable standards.

Annexation

As has been noted, it will be necessary for Drexel to annex additional areas if the Town is to expect to grow at its projected rate. While there is enough land within the present Town limits to accommodate the residential needs of the projected population increase, an insufficient amount of land exists to develop the total range of land use needs of the Drexel citizens. Without annexation, an improper balance of land use within the Town is likely to occur with residential use absorbing most of the available land. To prevent this from occurring, the following areas should be considered for annexation. They have been categorized as follows. See Map 6.

Short-Range: Areas that should be annexed in from 1 to 5 years.

Medium-Range: Areas that should be annexed in from 6 to 10 years.

Long-Range: Areas that should be annexed in from 11 to 20 years.

All areas within each category have also been assigned a priority which is designated by a number. The areas proposed for annexation are as follows:

Short-Range

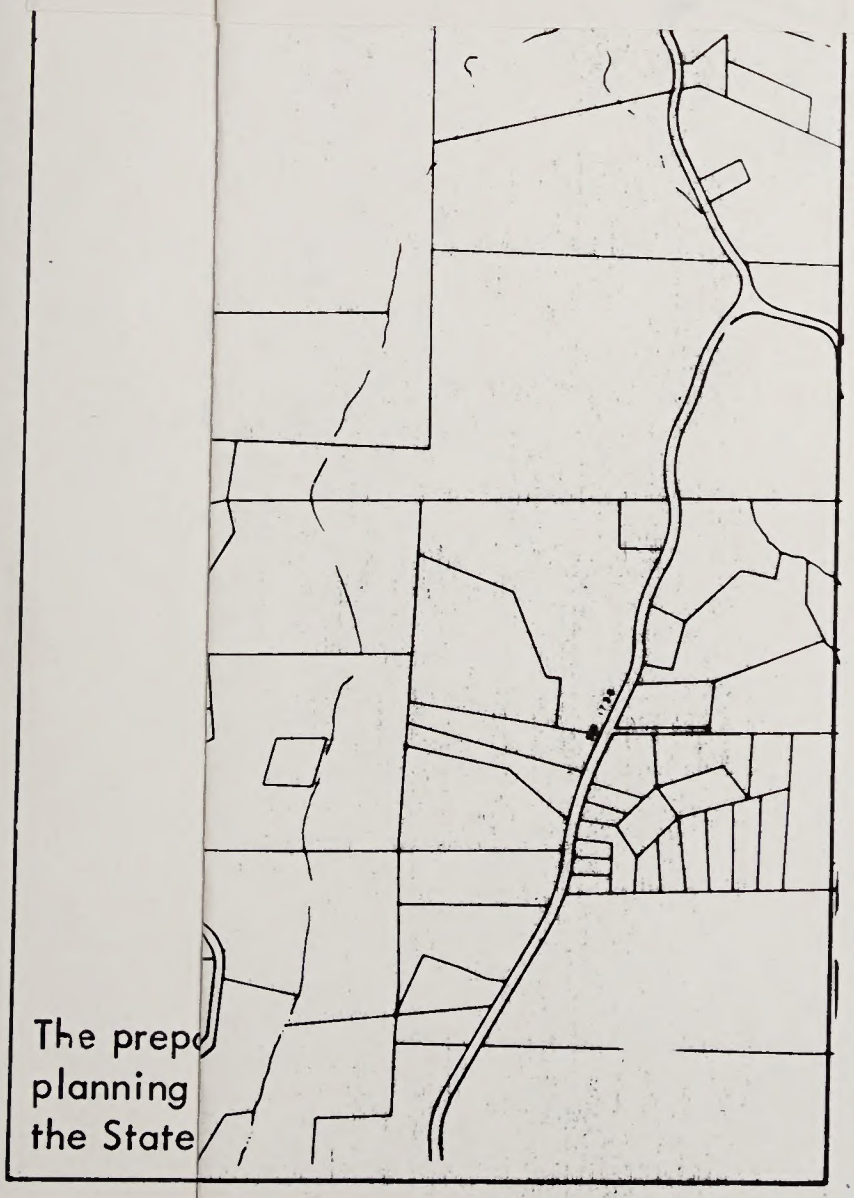
S-1. An area south of the present town limits along both sides of State Road 1525 extending across U.S. 64-70 approximately 1,100 feet. Residential development is predominant in these areas.

S-2. This area is south of the present town limits and extends east from South Main street to the Town limits. It is bounded on the south by Sechrest Creek. Most of the developed portion of this area is located on Castle Drive and Myrtle Street.

S-3. An area north of the present Town limits including the residentially-developed portion of Dearborn Street, and two unnamed streets to the east. It also includes some residential development between State Road 1536 and Oakland Avenue.

Medium Range:

M-1. This proposed area is south of Areas S-1 and S-2. It is located north and south of U.S. 64-70, and extends west of SR 1712 and east to the railroad tracks. There are several businesses and residences in this area. Much of the land is vacant but is beginning to develop residentially.



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the State

TOWN OF DREXEL

BURKE COUNTY, NORTH CAROLINA

DATE: NOV., 1975

BY: TRAFFIC AND PLANNING ASSOCIATES, INC.

MAP 6

500 0 500 1000

SCALE IN FEET

PROPOSED ANNEXATION

Legend

- SHORT RANGE
- MEDIUM RANGE
- LONG RANGE

L-4

M-4

S-3

M-3

L-3

S-2

S-1

M-2

M-1

L-2

The preparation of this report was financed in part through a comprehensive planning grant from the Department of Natural and Economic Resources of the State of North Carolina.

M-2. This area is located north and south of U.S. 64-70, and is east of the S-1 area. It is developed residentially, and includes development along State Road 1523 and First and Second Streets.

M-3. This area is bounded by the Town limits on the east and west, by the Southern Railroad on the north, and on the south by Settlemyre Road.

M-4. This area, north of the corporate limits, is bounded on the north by Howard's Creek, on the east by Dearborn Street, and on the south by the corporate limits. The majority of this area is now vacant and is suitable for industrial and residential development.

Long-Range:

L-1. North of the M-4 area there is located considerable residential development along Propst Road and State Road 1531.

L-2. This area is located south of U.S. 64-70 and is bounded by State Road 1712 and State Road 1525. This area has been programmed for industrial development in the Land Development Plan.

L-3. West of the Town limits and north of Woodland Circle and east of State Road 1525 is a vacant area that will probably develop residentially.

L-4. This area is located north and east of the Town limits. It is expected to develop residentially, but it should be noted that this area contains the steepest terrain in the planning area and this may handicap development.

Areas programmed for short-range annexation are sufficiently urbanized so that annexation proceedings can and should be initiated by the Town. Areas programmed for medium-range are not yet urbanized sufficiently to be annexed by the Town but could be annexed by petition. These areas, particulary M-2 and M-4, have vacant land that is ideal for industrial and residential development. The annexation of any of the long-range areas depends upon what is accomplished in the annexation of short and medium-range areas.

IMPLEMENTING THE PLAN

The preceding sections of this report describe a long-range plan for land use in the Drexel Planning Area. The Plan is not intended to be rigid and inflexible and must continually be re-evaluated in the light of changing conditions. It should be regarded as a general, rather than a specific, guide to future growth.

Nevertheless, if the Plan is to have any validity at all, actions must be taken to bring the general concepts into being. Without some means of implementing the plan, it has no practical value. There are a number of legal devices whereby the Plan can be implemented. The major ones are discussed below.

ZONING ORDINANCE

Although many people regard zoning as a means of controlling nuisances, the primary purpose of the zoning ordinance is to bring about an orderly pattern of land use -- in short, to implement the Land Use Plan. It is perhaps the most powerful tool available for implementing the Plan.

Drexel has a zoning ordinance which applies to the Town and its one-mile perimeter. The Zoning Ordinance divides the area of zoning jurisdiction into residential, commercial, and industrial areas. It also establishes minimum lot area, lot width and yard dimensions, and maximum building heights. It requires off-street parking and loading space, and regulates the number, size and type of signs.

The Drexel Zoning Ordinance provides for periodic amendment as conditions change or new facts come to light. All future amendments should be evaluated on the basis of the Land Use Plan. This is not to say that the Zoning Ordinance must exactly reflect the Plan, for the same changing conditions or new facts which call for a change in the Zoning Ordinance may also indicate a need to change the Land Use Plan. However, there should be compelling reasons for any amendment to the Zoning Ordiance which directly contradicts the Land Use Plan. If subsequent public decisions and amendments consistently disregard the Plan, private developers' faith in the Plan will be undermined and it becomes worthless.

SUBDIVISION ORDINANCE

Subdivisions are areas of undeveloped land which are developed with streets and lots for purpose of sale. If each developer is permitted to subdivide and sell lots without regard to a comprehensive plan for community growth, the results may create many

problems for the entire community in the future. This is evidenced by the fact that many of Drexel's present land use problems result from poor subdivision practices that existed prior to 1966 when the Town was without a subdivision ordinance.

Subdivision regulations require the developer to submit proposed subdivision plans to the Town for review and approval. This review process makes it possible, for example, for streets to be laid out in keeping with the plan for major thoroughfares. Subdivision regulations also require that good standards of design are adhered to; for example, they usually prohibit street jogs or offsets, set limits on street grades, require adequate street widths and prohibit sharp curves.

Drexel's Subdivision Regulations, like the Zoning Ordinance, apply to all the land within the Town limits and its one-mile perimeter.

EXTENSION OF STREETS AND UTILITIES

The locations of streets and utilities have a major effect on land development. This is illustrated by the Existing Land Use Map 3, insofar as streets are concerned. This map shows that, in outlying areas, development takes place in "ribbons" of growth along roads.

In its power to control the establishment of streets, sidewalks, parks, and utilities, the Town has another powerful tool for implementing the Land Use Plan. While some of the Town's authority over streets and utilities is exercised through subdivision regulations discussed above, there are certain policies, such as those governing the acceptance of streets for maintenance, etc. that are often set forth separately.

Similarly, the Town's policy regarding the extension of the utility lines may be stated independently of the subdivision regulations. These policies can have a profound effect on land development. For example, if it was the Town's policy not to extend utilities beyond the Town limits, fringe areas would probably develop more slowly than if utilities were available.

The Town's policies on methods of financing the construction of streets and utilities can also have an effect on land development. Town participation in development costs tends to encourage land development at a faster rate than would occur under a policy requiring the developer to assume the entire cost.

MINIMUM HOUSING CODES

Minimum housing codes insure that safe and adequate shelter is provided to all citizens of Drexel. These codes, if strictly enforced, erase many problems of blight created by

deteriorating housing. In doing so, minimum housing codes help implement the Land Use Plan by eliminating present residential land use problems and regulate the quality of future residential development.

ANNEXATION

Implementation of this Land Development Plan requires a program of annexation by the Town of Drexel. Annexation can be accomplished in several ways.

1. Drexel authorities can use zoning and subdivision ordinances and regulations to promulgate growth in those areas the Town desires to annex.

2. The advantages of annexation should be publicized. These advantages are provisions of necessary municipal improvements and services, lower insurance and utility rates, a broadened tax base, increased property values within the Town limits, and a desire to provide prime industrial and residential land.

Implementation of the Land Use Plan and its recommendations cannot occur all at once. Some of the problems and programs brought forth in this report are more immediately necessary than others and priority should be given to them. Following is a listing by land use classification of recommended short and long-range projects. Short-range projects should be accomplished in one to six years.

INDUSTRIAL

Short-Range

1. Create an Industrial Development Commission with the task of attracting new industry to the Drexel area. This effort should begin in the 1977/78 Fiscal Year after the labor market has stabilized following the current recession.

2. Annex land to the north to provide additional acreage for industry within the Town limits.

Long-Range

1. Extend sewerage facilties to serve prime industrial tracts within the fringe area.

2. Improve access to existing and proposed industrial sites.

BUSINESS

Short-Range

1. Improve off-street parking facilities through the development of parking facilities along the east side of Main Street.

2. Work with local CBD merchants and owners to improve the central areas of Drexel and to carry out a program of cooperation under which the Town will provide design for fronts and backs of stores, and the owners will make the actual improvements.

3. Create a local Merchants Association.

Long-Range

1. Work for the establishment of a shopping center.

SOCIAL AND CULTURAL

Short-Range

1. Acquire the property for suggested parks and recreation areas.

2. Work for the involvement of all the citizens of the community in the recreation program through the Drexel Community Center by providing more active programs which create a source of funds for maintenance of the Center and its activities.

3. Proceed with plans to construct a new Town Hall.

Long-Range

1. Develop the suggested park locations in the Land Development Plan.

RESIDENTIAL

Short-Range

1. Annex areas suggested in this report.

2. Proceed with plans to develop 24 units of Section 8 elderly housing on a site that is easily accessible to necessary service facilities such as food, shopping, and medical service facilities.

3. Extend sewerage facilities to prime residential areas within the fringe areas.

4. Promote the establishment of regulated mobile home parks.

Long-Range

1. Implement a residential street system properly coordinated with the adopted thoroughfare plan.

TRANSPORTATION

Short-Range

1. Widen streets in the older sections of Town to acceptable standards and install curb and gutter where necessary.

2. Improve the aesthetic quality and traffic flow on the periphery of the central area of Drexel by the beautification and improvement of traffic islands in the Town.

3. Implement the Thoroughfare Plan outlined in the 1967 Community Facilities Plan and Public Improvements Program. This is also a Long-Range item.

THE IMPACT OF THE DREXEL LAND DEVELOPMENT PLAN ON ENERGY CONSERVATION

The land use policies advocated in the Drexel Land Development Plan will have mixed influences on energy conservation. The plan, if implemented, will promote the separation and clustering of land uses. This will necessitate the commuter trip from residential areas to employment and commercial areas. This trip will most likely be by private vehicle and will consume energy. At the same time, the land use policies in the Plan utilize several economies of scale which operate to conserve energy. Where possible, commercial areas have been clustered and are located within easy access of residential areas. This will allow a "park and shop" situation and will eliminate the need to travel to several different locations to shop. Easy access will shorten the shopping trip.

Manufacturing areas have been located near existing transportation facilities. This will promote energy conservation in the shipping and receiving of goods. The proposed sketch Thoroughfare Plan will increase transportation efficiency and has been designed to benefit energy conservation in manufacturing and other land uses.

Residential uses have been located, where possible, near transportation facilities and in easy access to employment and commercial areas to reduce the need for long commuter trips and high energy consumption. The clustering of residential areas will also make carpooling more convenient.

In all cases land uses that require energy consumption have been located where energy resources are available. While some aspects of the plan require that energy be consumed, it is felt that the energy conservation measures outlined above far outweigh the energy consumption aspects.

ENVIRONMENTAL ASSESSMENT STATEMENT

The implementation of the Land Development Plan will have mixed influences on the environment of Drexel. These influences, both beneficial and adverse, will be discussed as follows:

Existing Physical Environment

Land and Climate:

Depending upon the proposed use of the land, some areas of Drexel will become more urbanized and some will have open space and natural vegetation. Therefore, the capacity for erosion will be increased in some areas and decreased in others. The plan advocates controlled growth and some of the adverse effects of urbanization will be offset by open space preservation. There are no environmental effects on the climate as a result of this plan.

Air and Water Quality:

Pollutants affecting air and water quality, such as dust, smog, odors, smoke and other wastes will concentrate to a greater degree in areas of urbanization and may even affect non-urban areas. To as great an extent as possible, residential and open space areas will be protected from pollutants as polluting land uses, such as manufacturing, will be separated from non-polluting uses such as residential and open areas. The Burke County 201 Facilities Plan, if implemented, would serve to improve water quality through the upgrading of wastewater treatment in Drexel.

Noise:

Noise pollution will also be concentrated in urbanized areas. Residential and open space areas will be relatively free from noise.

Vegetation, Wildlife, and Natural Areas:

Vegetation, wildlife, and natural areas will be preserved in areas planned for non-urban type growth. In areas of heavy urban growth, their chances for survival are somewhat lessened.

Surrounding Land Use and Physical Character of the Area:

Mixed and non-conforming uses will be avoided and land use densities will be planned according to supportive natural and man-made potentials.

Infrastructure:

Demand for ground water supply will be increased in areas of urbanization and possibly in some undeveloped areas. Sanitary and solid wastes will be concentrated in growth areas and will decrease in non-urban areas. The demand for transportation facilities, storm drainage, and energy may increase in urbanized areas but will decrease in areas preserved for open space.

Existing Social Environment

Community Facilities and Services:

Increased population and urban growth will increase the demand for community facilities and services.

Employment and Commercial Facilities:

Employment and commercial facilities will be separated from residential areas which will necessitate commuting trips. Land uses have been located so as to make these trips as efficient as possible. Non-compatible uses such as industry and residential will be separated, if this plan is adopted, thereby protecting land values and the local tax base.

Historical/Archeological Properties:

The proposed land use policies will have no known effect on historical/archeological properties. As far as is known, there are no such properties in the planning area.

Character of Community:

The socio-economic character of the local area may change. Centralization and separation of land uses tends to create a more communal use of facilities. The overall standard of living would improve with the location of additional industry in the community.

Aesthetic Environment

The policies set forth in the Land Development Plan are designed to preserve the good characteristics of the community and to eliminate bad characteristics. This plan seeks to preserve areas of natural and scenic beauty, wildlife, vegetation, soils, water, etc. and to concentrate development in areas where community facilities and service are, or can be, made available.

Public Reaction to the Proposed Plan

The Drexel Land Use Element has generated no known objections for environmental reasons during review of the proposed land use policies.

Alternatives to the Proposal

There are two alternatives to the proposed Land Development Plan for Drexel.

1. No plan - i.e. let development occur where it may. The adverse effects of no plan would far outweigh the beneficial impacts. Incompatible land uses would occur and pollution and erosion would most likely increase. All of the adverse effects listed above would be magnified.

2. No growth policy - While this alternative would certainly preserve the physical environment, the socio-economic environment would become stagnate and perhaps deteriorate due to out-migration of population and employment opportunities. A no growth policy may be difficult to enforce in the long-term as outside forces such as the growth of Morganton and Valdese begin to adversely affect the Drexel planning area.